

ISIS5582.ST25.txt  
SEQUENCE LISTING

<110> Ravikumar, Vasulinga  
Prakash, Thazha P.  
Bhat, Balkrishen

<120> OLIGOMERIC COMPOUNDS HAVING MODIFIED PHOSPHATE GROUPS

<130> ISIS-5582

<150> PCT/US03/10840  
<151> 2003-04-09

<150> US 10/119,432  
<151> 2002-04-09

<160> 66

<170> PatentIn version 3.3

<210> 1  
<211> 20  
<212> DNA  
<213> Artificial

<220>  
<223> Synthetic Construct

<400> 1  
gcccaagctg gcatccgtca 20

<210> 2  
<211> 19  
<212> DNA  
<213> Artificial

<220>  
<223> Synthetic Construct

<220>  
<221> misc\_feature  
<222> (19)..(19)  
<223> PS02

<400> 2  
gcccaagctg gcatccgtc 19

<210> 3  
<211> 20  
<212> DNA  
<213> Artificial

<220>  
<223> Synthetic Construct

<400> 3  
cggttcgac cgtaggcagt 20

<210> 4  
<211> 20  
<212> RNA  
<213> Artificial

<220>

<223> oligonucleotide

<220>  
<221> misc\_feature  
<222> (1)..(3)  
<223> 2'-deoxy-2'-fluorouridine

<220>  
<221> misc\_feature  
<222> (1)..(20)  
<223> PO

<220>  
<221> misc\_feature  
<222> (4)..(4)  
<223> 2'-deoxy-2'-fluoroguanosine

<220>  
<221> misc\_feature  
<222> (5)..(5)  
<223> 2'-deoxy-2'-fluorouridine

<220>  
<221> misc\_feature  
<222> (6)..(6)  
<223> 2'-deoxy-2'-fluorocytidine

<220>  
<221> misc\_feature  
<222> (7)..(7)  
<223> 2'-deoxy-2'-fluorouridine

<220>  
<221> misc\_feature  
<222> (8)..(8)  
<223> 2'-deoxy-2'-fluorocytidine

<220>  
<221> misc\_feature  
<222> (9)..(9)  
<223> 2'-deoxy-2'-fluorouridine

<220>  
<221> misc\_feature  
<222> (10)..(11)  
<223> 2'-deoxy-2'-fluoroguanosine

<220>  
<221> misc\_feature  
<222> (12)..(12)  
<223> 2'-deoxy-2'-fluorouridine

<220>  
<221> misc\_feature  
<222> (13)..(14)  
<223> 2'-deoxy-2'-fluorocytidine

<220>  
<221> misc\_feature  
<222> (15)..(16)  
<223> 2'-deoxy-2'-fluorouridine

<220>  
<221> misc\_feature  
<222> (17)..(17)  
<223> 2'-deoxy-2'-fluoroadenosine

<220>  
 <221> misc\_feature  
 <222> (18)..(18)  
 <223> 2'-deoxy-2'-fluorocytidine

<220>  
 <221> misc\_feature  
 <222> (19)..(20)  
 <223> 2'-deoxy-2'-fluorouridine

<400> 4  
 uuugucucug guccuuacuu

20

<210> 5  
 <211> 20  
 <212> RNA  
 <213> Artificial

<220>  
 <223> oligonucleotide

<220>  
 <221> misc\_feature  
 <222> (1)..(3)  
 <223> 2'-deoxy-2'-fluoroadenosine

<220>  
 <221> misc\_feature  
 <222> (1)..(20)  
 <223> PO

<220>  
 <221> misc\_feature  
 <222> (4)..(4)  
 <223> 2'-deoxy-2'-fluorocytidine

<220>  
 <221> misc\_feature  
 <222> (5)..(5)  
 <223> 2'-deoxy-2'-fluoroadenosine

<220>  
 <221> misc\_feature  
 <222> (6)..(6)  
 <223> 2'-deoxy-2'-fluoroguanosine

<220>  
 <221> misc\_feature  
 <222> (7)..(7)  
 <223> 2'-deoxy-2'-fluoroadenosine

<220>  
 <221> misc\_feature  
 <222> (8)..(8)  
 <223> 2'-deoxy-2'-fluoroguanosine

<220>  
 <221> misc\_feature  
 <222> (9)..(9)  
 <223> 2'-deoxy-2'-fluoroadenosine

<220>  
 <221> misc\_feature  
 <222> (10)..(11)  
 <223> 2'-deoxy-2'-fluorocytidine

<220>  
 <221> misc\_feature  
 <222> (12)..(12)  
 <223> 2'-deoxy-2'-fluoroadenosine

<220>  
 <221> misc\_feature  
 <222> (13)..(14)  
 <223> 2'-deoxy-2'-fluoroguanosine

<220>  
 <221> misc\_feature  
 <222> (15)..(16)  
 <223> 2'-deoxy-2'-fluoroadenosine

<220>  
 <221> misc\_feature  
 <222> (17)..(17)  
 <223> 2'-deoxy-2'-fluorouridine

<220>  
 <221> misc\_feature  
 <222> (18)..(18)  
 <223> 2'-deoxy-2'-fluoroguanosine

<220>  
 <221> misc\_feature  
 <222> (19)..(20)  
 <223> 2'-deoxy-2'-fluoroadenosine

<400> 5  
 aaacagagac caggaaugaa

20

<210> 6  
 <211> 20  
 <212> RNA  
 <213> Artificial

<220>  
 <223> oligonucleotide

<220>  
 <221> misc\_feature  
 <222> (1)..(3)  
 <223> 2'-deoxy-2'-fluorouridine

<220>  
 <221> misc\_feature  
 <222> (1)..(20)  
 <223> PS

<220>  
 <221> misc\_feature  
 <222> (4)..(4)  
 <223> 2'-deoxy-2'-fluoroguanosine

<220>  
 <221> misc\_feature  
 <222> (5)..(5)  
 <223> 2'-deoxy-2'-fluorouridine

<220>  
 <221> misc\_feature  
 <222> (6)..(6)  
 <223> 2'-deoxy-2'-fluorocytidine

```

<220>
<221> misc_feature
<222> (7)..(7)
<223> 2'-deoxy-2'-fluorouridine

<220>
<221> misc_feature
<222> (8)..(8)
<223> 2'-deoxy-2'-fluorocytidine

<220>
<221> misc_feature
<222> (9)..(9)
<223> 2'-deoxy-2'-fluorouridine

<220>
<221> misc_feature
<222> (10)..(11)
<223> 2'-deoxy-2'-fluoroguanosine

<220>
<221> misc_feature
<222> (12)..(12)
<223> 2'-deoxy-2'-fluorouridine

<220>
<221> misc_feature
<222> (13)..(14)
<223> 2'-deoxy-2'-fluorocytidine

<220>
<221> misc_feature
<222> (15)..(16)
<223> 2'-deoxy-2'-fluorouridine

<220>
<221> misc_feature
<222> (17)..(17)
<223> 2'-deoxy-2'-fluoroadenosine

<220>
<221> misc_feature
<222> (18)..(18)
<223> 2'-deoxy-2'-fluorocytidine

<220>
<221> misc_feature
<222> (19)..(20)
<223> 2'-deoxy-2'-fluorouridine

```

```

<400> 6
uuugucucug guccuuacuu

```

20

```

<210> 7
<211> 20
<212> RNA
<213> Artificial

<220>
<223> oligonucleotide

<220>
<221> misc_feature
<222> (1)..(20)
<223> PO

```

<400> 7  
uuugucucug guccuuacuu 20

<210> 8  
<211> 20  
<212> RNA  
<213> Artificial  
  
<220>  
<223> oligonucleotide

<220>  
<221> misc\_feature  
<222> (1)..(20)  
<223> PO

<400> 8  
aaacagagac caggaaugaa 20

<210> 9  
<211> 20  
<212> RNA  
<213> Artificial  
  
<220>  
<223> oligonucleotide

<220>  
<221> misc\_feature  
<222> (1)..(20)  
<223> PS

<400> 9  
uuugucucug guccuuacuu 20

<210> 10  
<211> 20  
<212> RNA  
<213> Artificial  
  
<220>  
<223> oligonucleotide

<220>  
<221> misc\_feature  
<222> (1)..(20)  
<223> PO

<220>  
<221> misc\_feature  
<222> (15)..(16)  
<223> 2'-O-methyluridine

<220>  
<221> misc\_feature  
<222> (17)..(17)  
<223> 2'-O-methyladenosine

<220>  
<221> misc\_feature  
<222> (18)..(18)  
<223> 2'-O-methylcytidine

<220>  
 <221> misc\_feature  
 <222> (19)..(20)  
 <223> 2'-O-methyluridine

<400> 10  
 uuugucucug guccuuacuu 20

<210> 11  
 <211> 20  
 <212> RNA  
 <213> Artificial

<220>  
 <223> oligonucleotide

<220>  
 <221> misc\_feature  
 <222> (1)..(20)  
 <223> PO

<220>  
 <221> misc\_feature  
 <222> (16)..(16)  
 <223> 2'-O-methyladenosine

<220>  
 <221> misc\_feature  
 <222> (17)..(17)  
 <223> 2'-O-methyluridine

<220>  
 <221> misc\_feature  
 <222> (18)..(18)  
 <223> 2'-O-methylguanosine

<220>  
 <221> misc\_feature  
 <222> (19)..(20)  
 <223> 2'-O-methyladenosine

<400> 11  
 aaacagagac caggaaugaa 20

<210> 12  
 <211> 20  
 <212> RNA  
 <213> Artificial

<220>  
 <223> oligonucleotide

<220>  
 <221> misc\_feature  
 <222> (1)..(20)  
 <223> PS

<220>  
 <221> misc\_feature  
 <222> (16)..(16)  
 <223> 2'-O-methyluridine

<220>

<221> misc\_feature  
 <222> (17)..(17)  
 <223> 2'-O-methyladenosine

<220>  
 <221> misc\_feature  
 <222> (18)..(18)  
 <223> 2'-O-methylcytidine

<220>  
 <221> misc\_feature  
 <222> (19)..(20)  
 <223> 2'-O-methyluridine

<400> 12  
 uuugucucug guccuuacuu

20

<210> 13  
 <211> 20  
 <212> RNA  
 <213> Artificial

<220>  
 <223> oligonucleotide

<220>  
 <221> misc\_feature  
 <222> (1)..(20)  
 <223> PO

<220>  
 <221> misc\_feature  
 <222> (15)..(16)  
 <223> 2'-deoxy-2'-fluorouridine

<220>  
 <221> misc\_feature  
 <222> (17)..(17)  
 <223> 2'-deoxy-2'-fluoroadenosine

<220>  
 <221> misc\_feature  
 <222> (18)..(18)  
 <223> 2'-deoxy-2'-fluorocytidine

<220>  
 <221> misc\_feature  
 <222> (19)..(20)  
 <223> 2'-deoxy-2'-fluorouridine

<400> 13  
 uuugucucug guccuuacuu

20

<210> 14  
 <211> 20  
 <212> RNA  
 <213> Artificial

<220>  
 <223> oligonucleotide

<220>  
 <221> misc\_feature  
 <222> (1)..(20)



<223> PO

<220>

<221> misc\_feature

<222> (16)..(16)

<223> 2'-deoxy-2'-fluoroadenosine

<220>

<221> misc\_feature

<222> (17)..(17)

<223> 2'-deoxy-2'-fluorouridine

<220>

<221> misc\_feature

<222> (18)..(18)

<223> 2'-deoxy-2'-fluoroguanosine

<220>

<221> misc\_feature

<222> (19)..(20)

<223> 2'-deoxy-2'-fluoroadenosine

<400> 14

aaacagagac caggaaugaa

20

<210> 15

<211> 20

<212> RNA

<213> Artificial

<220>

<223> oligonucleotide

<220>

<221> misc\_feature

<222> (1)..(20)

<223> PS

<220>

<221> misc\_feature

<222> (16)..(16)

<223> 2'-deoxy-2'-fluorouridine

<220>

<221> misc\_feature

<222> (17)..(17)

<223> 2'-deoxy-2'-fluoroadenosine

<220>

<221> misc\_feature

<222> (18)..(18)

<223> 2'-deoxy-2'-fluorocytidine

<220>

<221> misc\_feature

<222> (19)..(20)

<223> 2'-deoxy-2'-fluorouridine

<400> 15

uuugucucug guccuuacuu

20

<210> 16

<211> 20

<212> RNA

<213> Artificial

<220>  
<223> oligonucleotide

<220>  
<221> misc\_feature  
<222> (1)..(20)  
<223> 2',5'-linkage

<220>  
<221> misc\_feature  
<222> (1)..(20)  
<223> PO

<400> 16  
uuugucucug guccuuacuu 20

<210> 17  
<211> 20  
<212> RNA  
<213> Artificial

<220>  
<223> oligonucleotide

<220>  
<221> misc\_feature  
<222> (1)..(20)  
<223> 2',5'-linkage

<220>  
<221> misc\_feature  
<222> (1)..(20)  
<223> PO

<400> 17  
aaacagagac caggaaugaa 20

<210> 18  
<211> 20  
<212> RNA  
<213> Artificial

<220>  
<223> oligonucleotide

<220>  
<221> misc\_feature  
<222> (1)..(20)  
<223> 2',5'-linkage

<220>  
<221> misc\_feature  
<222> (1)..(20)  
<223> PS

<400> 18  
uuugucucug guccuuacuu 20

<210> 19  
<211> 20  
<212> RNA

<213> Artificial

<220>

<223> oligonucleotide

<220>

<221> misc\_feature

<222> (1)..(20)

<223> 2',5'-linkage

<220>

<221> misc\_feature

<222> (1)..(20)

<223> PO

<400> 19

uuugucucug guccuuacuu

20

<210> 20

<211> 20

<212> RNA

<213> Artificial

<220>

<223> oligonucleotide

<220>

<221> misc\_feature

<222> (1)..(20)

<223> 2',5'-linkage

<220>

<221> misc\_feature

<222> (1)..(20)

<223> PO

<400> 20

aaacagagac caggaaugaa

20

<210> 21

<211> 20

<212> RNA

<213> Artificial

<220>

<223> oligonucleotide

<220>

<221> misc\_feature

<222> (1)..(20)

<223> 2',5'-linkage

<220>

<221> misc\_feature

<222> (1)..(20)

<223> PS

<400> 21

uuugucucug guccuuacuu

20

<210> 22

<211> 20

<212> RNA  
<213> Artificial

<220>  
<223> oligonucleotide

<220>  
<221> misc\_feature  
<222> (1)..(20)  
<223> PO

<400> 22  
uuugucucug guccuuacuu 20

<210> 23  
<211> 20  
<212> RNA  
<213> Artificial

<220>  
<223> oligonucleotide

<220>  
<221> misc\_feature  
<222> (1)..(20)  
<223> PO

<400> 23  
aaacagagac caggaaugaa 20

<210> 24  
<211> 20  
<212> RNA  
<213> Artificial

<220>  
<223> oligonucleotide

<220>  
<221> misc\_feature  
<222> (1)..(20)  
<223> PS

<400> 24  
uuugucucug guccuuacuu 20

<210> 25  
<211> 20  
<212> RNA  
<213> Artificial

<220>  
<223> oligonucleotide

<220>  
<221> misc\_feature  
<222> (1)..(20)  
<223> PO

<220>  
<221> misc\_feature

<222> (15)..(16)  
 <223> 2'-O-methyluridine

<220>  
 <221> misc\_feature  
 <222> (17)..(17)  
 <223> 2'-O-methyladenosine

<220>  
 <221> misc\_feature  
 <222> (18)..(18)  
 <223> 2'-O-methylcytidine

<220>  
 <221> misc\_feature  
 <222> (19)..(20)  
 <223> 2'-O-methyluridine

<400> 25  
 uuugucucug guccuuacuu

20

<210> 26  
 <211> 20  
 <212> RNA  
 <213> Artificial

<220>  
 <223> oligonucleotide

<220>  
 <221> misc\_feature  
 <222> (1)..(20)  
 <223> PO

<220>  
 <221> misc\_feature  
 <222> (16)..(16)  
 <223> 2'-O-methyladenosine

<220>  
 <221> misc\_feature  
 <222> (17)..(17)  
 <223> 2'-O-methyluridine

<220>  
 <221> misc\_feature  
 <222> (18)..(18)  
 <223> 2'-O-methylguanosine

<220>  
 <221> misc\_feature  
 <222> (19)..(20)  
 <223> 2'-O-methyladenosine

<400> 26  
 aaacagagac caggaaugaa

20

<210> 27  
 <211> 20  
 <212> RNA  
 <213> Artificial

<220>  
 <223> oligonucleotide

<220>  
 <221> misc\_feature  
 <222> (1)..(20)  
 <223> PS

<220>  
 <221> misc\_feature  
 <222> (16)..(16)  
 <223> 2'-O-methyluridine

<220>  
 <221> misc\_feature  
 <222> (17)..(17)  
 <223> 2'-O-methyladenosine

<220>  
 <221> misc\_feature  
 <222> (18)..(18)  
 <223> 2'-O-methylcytidine

<220>  
 <221> misc\_feature  
 <222> (19)..(20)  
 <223> 2'-O-methyluridine

<400> 27  
 uuugucucug guccuuacuu

20

<210> 28  
 <211> 20  
 <212> RNA  
 <213> Artificial

<220>  
 <223> oligonucleotide

<220>  
 <221> misc\_feature  
 <222> (1)..(20)  
 <223> PO

<220>  
 <221> misc\_feature  
 <222> (15)..(16)  
 <223> 2'-deoxy-2'-fluorouridine

<220>  
 <221> misc\_feature  
 <222> (17)..(17)  
 <223> 2'-deoxy-2'-fluoroadenosine

<220>  
 <221> misc\_feature  
 <222> (18)..(18)  
 <223> 2'-deoxy-2'-fluorocytidine

<220>  
 <221> misc\_feature  
 <222> (19)..(20)  
 <223> 2'-deoxy-2'-fluorouridine

<400> 28  
 uuugucucug guccuuacuu

20

<210> 29  
<211> 20  
<212> RNA  
<213> Artificial

<220>  
<223> oligonucleotide

<220>  
<221> misc\_feature  
<222> (1)..(20)  
<223> PO

<220>  
<221> misc\_feature  
<222> (16)..(16)  
<223> 2'-deoxy-2'-fluoroadenosine

<220>  
<221> misc\_feature  
<222> (17)..(17)  
<223> 2'-deoxy-2'-fluorouridine

<220>  
<221> misc\_feature  
<222> (18)..(18)  
<223> 2'-deoxy-2'-fluoroguanosine

<220>  
<221> misc\_feature  
<222> (19)..(20)  
<223> 2'-deoxy-2'-fluoroadenosine

<400> 29  
aaacagagac caggaugaa

20

<210> 30  
<211> 20  
<212> RNA  
<213> Artificial

<220>  
<223> oligonucleotide

<220>  
<221> misc\_feature  
<222> (1)..(20)  
<223> PS

<220>  
<221> misc\_feature  
<222> (16)..(16)  
<223> 2'-deoxy-2'-fluorouridine

<220>  
<221> misc\_feature  
<222> (17)..(17)  
<223> 2'-deoxy-2'-fluoroadenosine

<220>  
<221> misc\_feature  
<222> (18)..(18)  
<223> 2'-deoxy-2'-fluorocytidine

<220>

<221> misc\_feature  
<222> (19)..(20)  
<223> 2'-deoxy-2'-fluorouridine

<400> 30  
uuugucucug guccuuacuu 20

<210> 31  
<211> 20  
<212> RNA  
<213> Artificial  
  
<220>  
<223> oligonucleotide

<220>  
<221> misc\_feature  
<222> (1)..(20)  
<223> PO

<220>  
<221> misc\_feature  
<222> (1)..(20)  
<223> 2',5'-linkage

<400> 31  
uuugucucug guccuuacuu 20

<210> 32  
<211> 20  
<212> RNA  
<213> Artificial  
  
<220>  
<223> oligonucleotide

<220>  
<221> misc\_feature  
<222> (1)..(20)  
<223> PO

<220>  
<221> misc\_feature  
<222> (1)..(20)  
<223> 2',5'-linkage

<400> 32  
aaacagagac caggaaugaa 20

<210> 33  
<211> 20  
<212> RNA  
<213> Artificial  
  
<220>  
<223> oligonucleotide

<220>  
<221> misc\_feature  
<222> (1)..(20)  
<223> PS



<220>  
 <221> misc\_feature  
 <222> (1)..(20)  
 <223> 2',5'-linkage

<400> 33  
 uuugucucug guccuuacuu

20

<210> 34  
 <211> 20  
 <212> RNA  
 <213> Artificial

<220>  
 <223> oligonucleotide

<220>  
 <221> misc\_feature  
 <222> (1)..(20)  
 <223> 2',5'-linkage

<220>  
 <221> misc\_feature  
 <222> (1)..(20)  
 <223> PO

<400> 34  
 uuugucucug guccuuacuu

20

<210> 35  
 <211> 20  
 <212> RNA  
 <213> Artificial

<220>  
 <223> oligonucleotide

<220>  
 <221> misc\_feature  
 <222> (1)..(20)  
 <223> 2',5'-linkage

<220>  
 <221> misc\_feature  
 <222> (1)..(20)  
 <223> PO

<400> 35  
 aaacagagac caggaaugaa

20

<210> 36  
 <211> 20  
 <212> RNA  
 <213> Artificial

<220>  
 <223> oligonucleotide

<220>  
 <221> misc\_feature  
 <222> (1)..(20)  
 <223> 2',5'-linkage

```

<220>
<221> misc_feature
<222> (1)..(20)
<223> PS

<400> 36
uuugucucug guccuuacuu                                20

<210> 37
<211> 20
<212> RNA
<213> Artificial

<220>
<223> oligonucleotide

<220>
<221> misc_feature
<222> (1)..(20)
<223> PO

<400> 37
uuugucucug guccuuacuu                                20

<210> 38
<211> 20
<212> RNA
<213> Artificial

<220>
<223> oligonucleotide

<220>
<221> misc_feature
<222> (1)..(20)
<223> PO

<400> 38
aaacagagac caggaaugaa                                20

<210> 39
<211> 20
<212> RNA
<213> Artificial

<220>
<223> oligonucleotide

<220>
<221> misc_feature
<222> (1)..(20)
<223> PS

<400> 39
uuugucucug guccuuacuu                                20

<210> 40
<211> 20
<212> RNA
<213> Artificial

```

<220>  
 <223> oligonucleotide

<220>  
 <221> misc\_feature  
 <222> (1)..(20)  
 <223> PO

<220>  
 <221> misc\_feature  
 <222> (15)..(16)  
 <223> 2'-O-methyluridine

<220>  
 <221> misc\_feature  
 <222> (17)..(17)  
 <223> 2'-O-methyladenosine

<220>  
 <221> misc\_feature  
 <222> (18)..(18)  
 <223> 2'-O-methylcytidine

<220>  
 <221> misc\_feature  
 <222> (19)..(20)  
 <223> 2'-O-methyluridine

<400> 40  
 uuugucucug guccuuacuu

<210> 41  
 <211> 20  
 <212> RNA  
 <213> Artificial

<220>  
 <223> oligonucleotide

<220>  
 <221> misc\_feature  
 <222> (1)..(20)  
 <223> PO

<220>  
 <221> misc\_feature  
 <222> (16)..(16)  
 <223> 2'-O-methyladenosine

<220>  
 <221> misc\_feature  
 <222> (17)..(17)  
 <223> 2'-O-methyluridine

<220>  
 <221> misc\_feature  
 <222> (18)..(18)  
 <223> 2'-O-methylguanosine

<220>  
 <221> misc\_feature  
 <222> (19)..(20)  
 <223> 2'-O-methyladenosine

20

<400> 41  
aaacagagac caggaaugaa

20

<210> 42  
<211> 20  
<212> RNA  
<213> Artificial

<220>  
<223> oligonucleotide

<220>  
<221> misc\_feature  
<222> (1)..(20)  
<223> PS

<220>  
<221> misc\_feature  
<222> (16)..(16)  
<223> 2'-O-methyluridine

<220>  
<221> misc\_feature  
<222> (17)..(17)  
<223> 2'-O-methyladenosine

<220>  
<221> misc\_feature  
<222> (18)..(18)  
<223> 2'-O-methylcytidine

<220>  
<221> misc\_feature  
<222> (19)..(20)  
<223> 2'-O-methyluridine

<400> 42  
uuugucucug guccuuacuu

20

<210> 43  
<211> 20  
<212> RNA  
<213> Artificial

<220>  
<223> oligonucleotide

<220>  
<221> misc\_feature  
<222> (1)..(20)  
<223> PO

<220>  
<221> misc\_feature  
<222> (15)..(16)  
<223> 2'-deoxy-2'-fluorouridine

<220>  
<221> misc\_feature  
<222> (17)..(17)  
<223> 2'-deoxy-2'-fluoroadenosine

<220>  
<221> misc\_feature

<222> (18)..(18)  
 <223> 2'-deoxy-2'-fluorocytidine

<220>  
 <221> misc\_feature  
 <222> (19)..(20)  
 <223> 2'-deoxy-2'-fluorouridine

<400> 43  
 uuugucucug guccuuacuu

20

<210> 44  
 <211> 20  
 <212> RNA  
 <213> Artificial

<220>  
 <223> oligonucleotide

<220>  
 <221> misc\_feature  
 <222> (1)..(20)  
 <223> PO

<220>  
 <221> misc\_feature  
 <222> (16)..(16)  
 <223> 2'-deoxy-2'-fluoroadenosine

<220>  
 <221> misc\_feature  
 <222> (17)..(17)  
 <223> 2'-deoxy-2'-fluorouridine

<220>  
 <221> misc\_feature  
 <222> (18)..(18)  
 <223> 2'-deoxy-2'-fluoroguanosine

<220>  
 <221> misc\_feature  
 <222> (19)..(20)  
 <223> 2'-deoxy-2'-fluoroadenosine

<400> 44  
 aaacagagac caggaugaa

20

<210> 45  
 <211> 20  
 <212> RNA  
 <213> Artificial

<220>  
 <223> oligonucleodide

<220>  
 <221> misc\_feature  
 <222> (1)..(20)  
 <223> PS

<220>  
 <221> misc\_feature  
 <222> (16)..(16)  
 <223> 2'-deoxy-2'-fluorouridine

<220>  
 <221> misc\_feature  
 <222> (17)..(17)  
 <223> 2'-deoxy-2'-fluoroadenosine

<220>  
 <221> misc\_feature  
 <222> (18)..(18)  
 <223> 2'-deoxy-2'-fluorocytidine

<220>  
 <221> misc\_feature  
 <222> (19)..(20)  
 <223> 2'-deoxy-2'-fluorouridine

<400> 45  
 uuugucucug guccuuacuu 20

<210> 46  
 <211> 20  
 <212> RNA  
 <213> Artificial

<220>  
 <223> oligonucleotide

<220>  
 <221> misc\_feature  
 <222> (1)..(20)  
 <223> PO

<220>  
 <221> misc\_feature  
 <222> (1)..(20)  
 <223> 2',5'-linkage

<400> 46  
 uuugucucug guccuuacuu 20

<210> 47  
 <211> 20  
 <212> RNA  
 <213> Artificial

<220>  
 <223> oligonucleotide

<220>  
 <221> misc\_feature  
 <222> (1)..(20)  
 <223> PO

<220>  
 <221> misc\_feature  
 <222> (1)..(20)  
 <223> 2',5'-linkage

<400> 47  
 aaacagagac caggaaugaa 20

<210> 48  
 <211> 20

<212> RNA  
 <213> Artificial  
 <220>  
 <223> oligonucleotide

<220>  
 <221> misc\_feature  
 <222> (1)..(20)  
 <223> 2',5'-linkage

<220>  
 <221> misc\_feature  
 <222> (1)..(20)  
 <223> PS

<400> 48  
 uuugucucug guccuuacuu

20

<210> 49  
 <211> 20  
 <212> RNA  
 <213> Artificial

<220>  
 <223> oligonucleotide

<220>  
 <221> misc\_feature  
 <222> (1)..(20)  
 <223> 2',5'-linkage

<220>  
 <221> misc\_feature  
 <222> (1)..(20)  
 <223> PO

<400> 49  
 uuugucucug guccuuacuu

20

<210> 50  
 <211> 20  
 <212> RNA  
 <213> Artificial

<220>  
 <223> oligonucleotide

<220>  
 <221> misc\_feature  
 <222> (1)..(20)  
 <223> 2',5'-linkage

<220>  
 <221> misc\_feature  
 <222> (1)..(20)  
 <223> PO

<400> 50  
 aaacagagac caggaaugaa

20

<210> 51

<211> 20  
 <212> RNA  
 <213> Artificial

<220>  
 <223> oligonucleotide

<220>  
 <221> misc\_feature  
 <222> (1)..(20)  
 <223> 2',5'-linkage

<220>  
 <221> misc\_feature  
 <222> (1)..(20)  
 <223> PS

<400> 51  
 uuugucucug guccuuacuu

20

<210> 52  
 <211> 20  
 <212> DNA  
 <213> Artificial

<220>  
 <223> oligonucleotide

<220>  
 <221> misc\_feature  
 <222> (1)..(3)  
 <223> 2'-O-methoxyethyl

<220>  
 <221> misc\_feature  
 <222> (13)..(20)  
 <223> 2'-O-methoxyethyl

<400> 52  
 tccgtcatcg ctcctcaggg

20

<210> 53  
 <211> 20  
 <212> DNA  
 <213> Artificial

<220>  
 <223> oligonucleotide

<220>  
 <221> misc\_feature  
 <222> (1)..(5)  
 <223> 2'-O-methoxyethyl

<220>  
 <221> misc\_feature  
 <222> (16)..(20)  
 <223> 2'-O-methoxyethyl

<400> 53  
 gtgcgcgcga gcccgaaatc

20



<210> 54  
<211> 20  
<212> DNA  
<213> Artificial

<220>  
<223> oligonucleotide

<220>  
<221> misc\_feature  
<222> (1)..(5)  
<223> 2'-O-methoxyethyl

<220>  
<221> misc\_feature  
<222> (16)..(20)  
<223> 2'-O-methoxyethyl

<400> 54  
atgcattctg cccccaagga 20

<210> 55  
<211> 19  
<212> DNA  
<213> Artificial

<220>  
<223> oligonucleotide

<220>  
<221> misc\_feature  
<222> (19)..(19)  
<223> 2'-deoxy

<400> 55  
ctacgctttc cacgcacag 19

<210> 56  
<211> 19  
<212> DNA  
<213> Artificial

<220>  
<223> oligonucleotide

<220>  
<221> misc\_feature  
<222> (19)..(19)  
<223> 3'-phosphorothioate

<400> 56  
ctacgctttc cacgcacag 19

<210> 57  
<211> 19  
<212> DNA  
<213> Artificial

<220>  
<223> oligonucleotide

<220>  
<221> misc\_feature  
<222> (19)..(19)  
<223> 2'-phosphorothioate

<400> 57  
ctacgctttc cacgcacag

19

<210> 58  
<211> 19  
<212> DNA  
<213> Artificial

<220>  
<223> oligonucleotide

<220>  
<221> misc\_feature  
<222> (19)..(19)  
<223> 2'-methoxyethoxy, 3'-phosphorothioate

<400> 58  
ctacgctttc cacgcacag

19

<210> 59  
<211> 19  
<212> DNA  
<213> Artificial

<220>  
<223> oligonucleotide

<220>  
<221> misc\_feature  
<222> (19)..(19)  
<223> 3'-methylphosphorothionate

<400> 59  
ctacgctttc cacgcacag

19

<210> 60  
<211> 19  
<212> DNA  
<213> Artificial

<220>  
<223> oligonucleotide

<220>  
<221> misc\_feature  
<222> (19)..(19)  
<223> 3'-methylphosphonate

<400> 60  
ctacgctttc cacgcacag

19

<210> 61  
<211> 19  
<212> DNA  
<213> Artificial

<220>  
<223> oligonucleotide

<220>  
<221> misc\_feature  
<222> (19)..(19)  
<223> 3'-phosphorothioate ethoxyphosphorothioate

<400> 61  
ctacgctttc cacgcacag 19

<210> 62  
<211> 19  
<212> DNA  
<213> Artificial

<220>  
<223> oligonucleotide

<220>  
<221> misc\_feature  
<222> (19)..(19)  
<223> 3'-phosphorothioate ethoxyphosphorothioate ethoxyphosphorotioate

<400> 62  
ctacgctttc cacgcacag 19

<210> 63  
<211> 19  
<212> DNA  
<213> Artificial

<220>  
<223> oligonucleotide

<220>  
<221> misc\_feature  
<222> (19)..(19)  
<223> 5'-phosphorothioate

<400> 63  
ctacgctttc cacgcacag 19

<210> 64  
<211> 19  
<212> DNA  
<213> Artificial

<220>  
<223> oligonucleotide

<400> 64  
cgagaggcgg acgggaccg 19

<210> 65  
<211> 21  
<212> DNA  
<213> Artificial

<220>  
<223> oligonucleotide

<220>  
 <221> misc\_feature  
 <222> (20)..(21)  
 <223> deoxythymidine(dT)

<400> 65  
 cgagaggcgg acgggaccgt t 21

<210> 66  
 <211> 21  
 <212> DNA  
 <213> Artificial

<220>  
 <223> oligonucleotide

<220>  
 <221> misc\_feature  
 <222> (20)..(21)  
 <223> deoxythymidine(dT)

<400> 66  
 cggtcccgtc cgcctctcgt t 21